



GR1653

MOTOR GRADER

平地机

The grader is mainly used for the ground leveling and ditching, slope scraping, bulldozing, soil loosening, snow removal and others of large areas of highways, airports and farmlands etc. It is indispensable to the building construction of national defense construction, mine construction and urban and rural road and others, as well as the water conservancy construction and farmland improvement etc.

平地机主要用于公路、机场、农田等大面积的地面平整和挖沟、刮坡、推土、松土、除雪等作业。是国防工程、矿山建设、城乡道路等建筑施工和水利建设、农田改良等所必须的工程机械。

Performance Characteristics / 性能特点

- It is equipped with National III turbo-charging diesel engine. With large output torque and great power reserve coefficient, the fuel consumption is low.
- The drive axle is the dedicated rear axle of XCMG, and the rear axle operates in the manner of equalizing suspension system to guarantee uniform load of the four wheels and fully give play to its adhesive ability. The main drive of rear axle is equipped with "NO-SPIN" self-locking differential mechanism. In case of wheel-slip in one side, wheels in the other side can still transmit the original torque. Therefore, sufficient traction can be guaranteed for the whole machine regardless of the pavement conditions.
- The front axle is a steering axle. The axle can swing from left to right. In addition to the front-wheel steering, the machine is also equipped with articulated frame, which can further reduce the radius of turning circle.
- The hood is composed of structural components, with attractive and smooth appearance, side doors and rotatable feature as a whole and maintainability is enhanced.
- The cab is a closed one equipped with the air conditioning system, and the interiors are compression molding parts with smooth appearance, fully meeting the requirement of ergonomics.
- 采用国Ⅲ涡轮增压柴油机。输出扭矩和功率储备系数大，油耗低。
- 驱动桥为徐工专用后桥，后轴采用平衡悬挂方式能够保证四个车轮负荷均匀，有利于充分发挥它的附着能力。后桥主传动装有“NO-SPIN”无自锁差速器。当一侧车轮打滑时，另一侧车轮仍然能传递其原有扭矩。因此，无论路面情况如何均能保证整机有足够的牵引力。
- 前桥为转向桥。桥体可左右摆动。该机除前轮转向外，还采用了铰接车架，可使转弯半径进一步减小。
- 机罩采用结构件，造型美观流畅，两侧开侧门，整体可翻转，提高了维修性。
- 采用密封驾驶室，配置空调系统，内饰件为造型流畅的压塑件，充分体现了人机工程的需要。

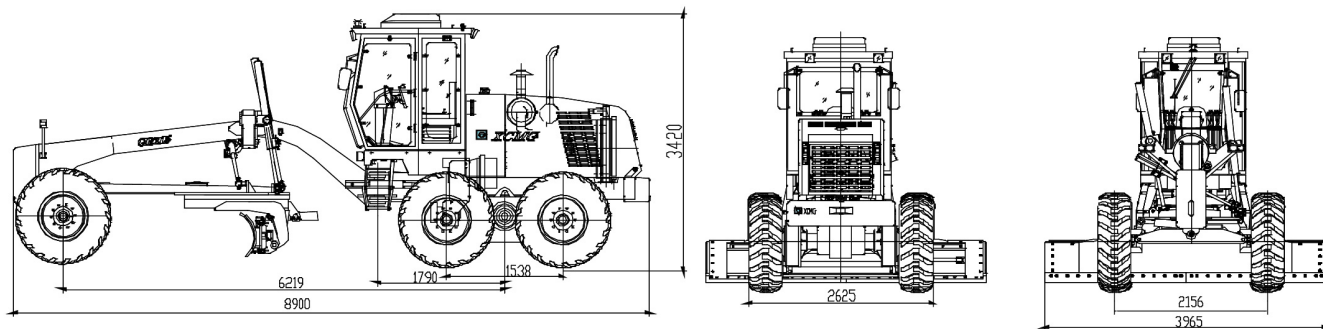
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平地机

Main Dimensions

主要尺寸



Main Specifications

主要技术参数

| | Item | 项目 | GR1653 | |
|---------------------------------------|-----------------------------------|---|---------------------|----------|
| Basic parameters 基本参数 | Engine model | 发动机型号 | SC7H180.1G3 | |
| | Rated power/speed | 额定功率/转速 | 132kW/2000rpm | |
| | Overall dimension (standard) | 整机外形尺寸 (标配) | 8900x2625x3420 | |
| | Total weight (standard) | 整机重量 (标配) | 14500 kg | |
| | Tire specification | 轮胎规格 | 17.5-25 | |
| | Ground clearance (front axle) | 离地间隙 (前桥) | 430mm | |
| | Tread | 轮距 | 2156mm | |
| | Space of front and rear axles | 前后桥距 | 6219 mm | |
| Performance parameters 性能参数 | Space of middle and rear wheels | 中后轮距 | 1538 mm | |
| | Forward velocity | 前进速度 | 5、8、11、19、23、38km/h | |
| | Reverse speed | 后退速度 | 5、11、23km/h | |
| | Tractive effort f=0.75 | 牵引力f=0.75 | 77 kN | |
| | Maximum gradeability | 最大爬坡能力 | 20% | |
| | Inflation pressure of tires | 轮胎充气压力 | 260kPa | |
| | Working system pressure | 工作系统压力 | 20MPa | |
| | Transmission pressure | 变速箱压力 | 1.3—1.8Mpa | |
| | Working parameters 工作参数 | Maximum steering angle of front wheels | 前轮最大转向角 | ±48° |
| | | Maximum inclination angle of front wheels | 前轮最大倾斜角 | ±17° |
| Maximum swing angle of front axle | | 前桥最大摆动角 | ±15° | |
| Maximum swing angle of balance box | | 平衡箱最大摆动角 | Front 15°, rear 15° | |
| Maximum steering angle of frame | | 车架最大转向角 | 15° ±27° | |
| Minimum turning radius | | 最小转弯半径 | 7.1m | |
| Blade | | Maximum lifting height | 最大提升高度 | 400mm |
| | | Maximum shoveling depth | 最大铲土深度 | 500mm |
| | | Maximum lateral inclination angle | 最大侧倾角度 | 90° |
| | | Cutting angle | 切削角 | 28° —70° |
| | Slewing angle | 回转角 | 360° | |
| Length × chord height | 长度x弦高 | 3660x610mm | | |
| Oil filling amount 加注油量 | Coolant | 冷却液 | 50L | |
| | Fuel tank | 燃油箱 | 280L | |
| | Engine | 发动机 | 24L | |
| | Transmission | 变速箱 | 38L | |
| | Balance box | 平衡箱 | 46L | |
| | Drive axle | 驱动桥 | 28L | |
| | Hydraulic oil | 液压油 | 110L | |